

# Trends in Airfare Expenditures

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According to published reports by the Air Transport Association,<sup>1</sup> the airline travel industry is looking to rebound from the September 11, 2001, (9/11) terrorist attacks. As reported, Americans were traveling in record numbers before 9/11 but decreased their traveling considerably after 9/11. In addition to customers' wariness regarding flying just following 9/11, a sluggish economy in late 2001 and 2002 contributed to this decrease. This article examines trends in spending on travel in the years prior to and just after 9/11, using data from the U.S. Bureau of Labor Statistics Consumer Expenditure Interview Survey. The focus is specifically on airfare expenditures, which are compared across age groups and regions of residence. Age was selected because of the different lifestyles among the various age groups, as well as the income differences among them. Region was selected, to see if there was a larger effect in those regions that were the primary focus of the attacks.

## Methodology

Travel expenditures in the Consumer Expenditure Survey (CE) are broken down into five main groups: transportation, food, lodging, entertainment, and purchase of gifts. Transportation

expenditures include all costs traveling to and from the destination, as well as transportation costs incurred while on the trip. This study focused on spending on airfares. Data are reported as aggregate and average expenditures per consumer unit<sup>2</sup> for each of the spending groups. Average expenditures per consumer unit are used in comparing regions, due to varying population counts among them. Quarterly data from the Consumer Expenditure Interview Survey are used for the period 1998 through 2002. Aggregate amounts were estimated with weights derived from the survey. Excluded are all business-related expenditures for which the consumer unit was reimbursed.

## Trends in airfare expenditures

### *All consumer units*

Consumer Expenditure data show that spending on airfare is cyclical, with the highest expenditures posted in the spring and summer months (the second and third quarters). The third quarter of 2001 showed a peak in the data for the 5-year period.<sup>3</sup> (See chart 1 and table 1.) Aggregate airfare expenditures

<sup>2</sup> See the glossary in the appendix for the definition of a *consumer unit*.

<sup>3</sup> This figure could have been even higher if not for the fact that the events of 9/11 took place in the third quarter and the subsequent closures of airports and restrictions immediately crippled the industry.

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<sup>1</sup> See Keith L. Alexander, "Flights Filling Up, Airlines and Hotels Hiking Prices." *The Washington Post*, May 23, 2004, p. F.01.

reached almost \$9 billion that summer. This was followed by a downturn in which the lowest aggregate expenditure of the period, \$5 billion, was reported in the first quarter of 2002. Although the first quarter is typically the slowest quarter for any given year, the average expenditure for the first quarter of the previous years (1998–2001) was \$6 billion. The percentage of consumer units who reported taking a trip by airplane also declined. From 1998 through 2001, an average of 32 percent of travelers got to their destination by flying. By 2002, that number had slipped to 28 percent. The latter part of 2002 saw a rebound, with \$8 billion spent by consumers in the summer of 2002 and the percentage of travelers going by plane edging back up to 32 percent.

#### *Age Groups<sup>4</sup>*

*Under 25.* The events of 9/11 appear to have had a large effect on airfare expenditures for the under-age-25 group. The years 1998 through 2001 saw a steady cyclical pattern of spending, with the exception being a robust 1998 summer. (See chart 2 and table 1.) Another peak in the summer of 2001 showed expenditures matching the 1998 summer figure of \$420 million. This peak was followed by a decrease in the fourth quarter of 2001, just after 9/11, in which expenditures fell to the 5-year low of \$150 million, marking a larger decrease in expenditures than could be explained by the typical cyclical dropoff in the fourth quarter. To put the decline in perspective, spending on airfare for the fourth quarters from 1998 through 2000 by those under 25 averaged \$215 million, while in the fourth quarter of 2001, it was \$150 million.

*Age 25 to 44.* Compared with the 25-and-under group, 25- to 44-year-olds reported airfare expenditures that had less volatile swings. The summers of 1998 and 2000 had the biggest peaks, with the former topping out at \$3.2 bil-

lion and the latter reaching \$3.4 billion. (See chart 3 and table 1.) Surprisingly, there was not much of a decrease in the fourth quarter of 2001, when expenditures dropped just \$200 million from the previous quarter, to 2.6 billion dollars. A bigger drop was felt in the first quarter of 2002, when expenditures fell to 2 billion dollars. The age group, consisting of 25- to 44-year-olds, spends more, on average, and is a larger group, than the under-age-25 group, so even a small change between quarters may have a greater effect on total aggregate expenditures. For example, the dropoff in expenditures from the fourth quarter of 2001 to the first quarter of 2002 was \$600 million, a figure greater than the highest expenditure reported—\$420 million—for any quarter by the less-than-25 age group.

*Age 45 to 64.* As with the 25-to-44-year age group, airfare expenditures for the 45- to 54-year group showed the cyclical pattern common to the data. The highest expenditures of any quarter were in the summers of 2001 and 2002, \$3.3 billion for both. (See chart 4 and table 1.) The fourth quarter of 2001, just after the events of 9/11, saw an \$800 million dropoff in expenditures from the previous quarter's figure; the decline was the biggest from any given quarter to the next.

*Age 65 and older.* At \$2.3 billion, spending on airfares in the summer of 2001 by the age-65-and-older group was the highest of any quarter for the group for the 5-year period. (See chart 5 and table 1.) There was a sharp decline in the fourth quarter, when expenditures fell to \$780 million. This fall off is of note because those 65 years and older posted strong fourth quarters in 1998 and 2000, spending \$300 million more in the fourth quarter than they did in the previous third quarter, which is typically the quarter in which airfare expenditures are highest. It is possible that this age group tends to travel more in the holiday season to be with families, whereas the other age groups spend more on summer leisure travel. By the first quarter of 2002, expenditures by

those age 65 and older were at the lowest level for the 5-year period, 650 million dollars. This figure marked a 1.65 billion dollar decrease in total expenditures from the summer of 2001—the biggest decrease in total expenditures among the age groups for the pre- and post- 9/11 period.

#### *Regions*

*Northeast.* Because the events of 9/11 were centered primarily in the Northeast, it would be reasonable to think that that region would be most affected in the aftermath. As was the case for the country as a whole, the summer of 2001 set a 5-year-period high for the Northeast region, slightly more than \$2 billion spent on airfares. (See table 2 and chart 6.) This quarter also had the highest average expenditures per consumer unit among any of the regions, \$310. (See table 3.) After 9/11, the fourth quarter of 2001 saw a 35-percent decline in average expenditures, to \$200. This decline is significant compared with changes during the other 4 years in the study, which saw increases in average expenditures in the fourth quarter for the Northeast. Spending on airfare slid even further in the first quarter of 2002, to \$174, the second-lowest average in the 5-year period, apart from the first quarter of 1998. By the summer of 2002, average expenditures were a little higher, at \$206, but this figure still marked a 34-percent decrease from that of the previous summer. The drop was the biggest percentagewise among the regions.

*Midwest.* The events of 9/11 seemed to have less of an effect on airline travelers in the Midwest region, which posted the steadiest set of data in the 5-year period. (See chart 7.) In the Midwest, average annual expenditures per consumer unit dropped 11 percent from the summer of 2001 to the summer of 2002—the smallest decrease among the regions over that period.

*South.* Like the Midwest, the events of 9/11 seemed to have less of an effect on airline travelers in the South. It is of

<sup>4</sup> Age classifications are by the age of the reference person. See the glossary in the appendix for a definition of *reference person*.

note that the summer of 2001 was the only quarter in the 5-year period to post an average expenditure per consumer unit above \$200, namely, \$214. In the summer of 2002, average expenditures fell to \$179, a 16-percent drop. (See table 3 and chart 8.)

*West.* The West was the region second highest to the Northeast in average quarterly expenditures per consumer unit for the entire 5-year period, at \$207, compared with \$226 for the Northeast. (See table 3 and chart 9.) At \$162, average quarterly expenditures per consumer unit were at the second-lowest point of the 5-year period in the fourth quarter of 2001, just after 9/11, a 34-percent decrease from the third quarter. Expenditures did not rebound until

the summer of 2002, when average quarterly expenditures per consumer unit were back above \$200. Average annual expenditures from the summer of 2001 to the summer of 2002 fell 18 percent, the second-highest percentage drop after that of the Northeast region's.

### **Conclusion**

The data presented here show that spending on airline fares was at a high point just prior to the events of 9/11. Thereafter, a sharp decrease ensued. Total airfare spending by all consumer units dropped from \$8.9 billion in the third quarter of 2001 to \$6.1 billion in the fourth quarter, a 31-percent decrease. The 8.9 billion dollars spent in the third quarter of 2001 was 14 percent higher than the 7.8 billion dollars

spent a year later, in the third quarter of 2002. The most affected age groups were the oldest and the youngest, and the most affected region was the Northeast, followed by the West. This slowdown, which continued into 2002, can be attributed primarily to the shock of 9/11, but also to a weak economy. Excluding airfare, expenditures involving other modes of transportation (train, ship, or car) also went down. Spending by all consumer units dropped from roughly \$2.8 billion in the third quarter of 2001 to \$1.7 billion in the fourth quarter of 2001. The drop was significant, as expenditures in the fourth quarter of 2000 were \$3.3 billion. By the fourth quarter of 2002, expenditures had rebounded back up to approximately \$3 billion. ■

Table 1. Quarterly airfare expenditures, in billions of dollars, by age of reference person, Consumer Expenditure Interview Survey, 1998–2002

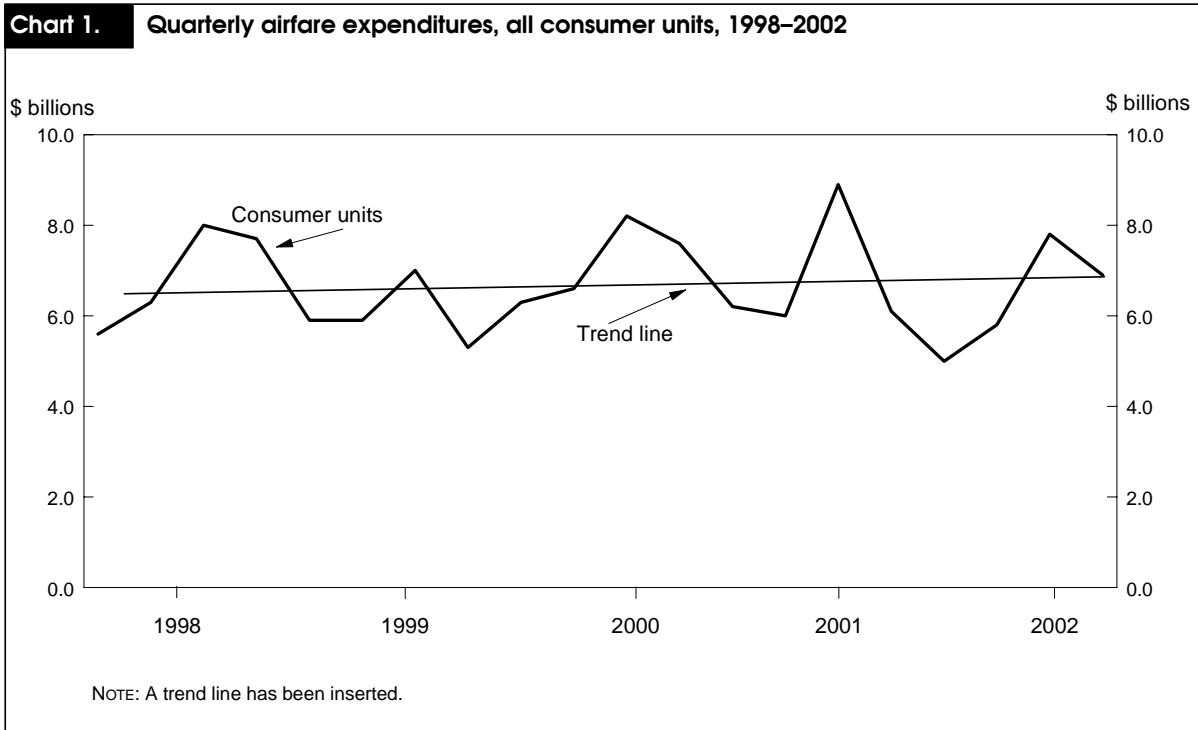
Year and quarter	All consumer units	Under 25 years	25–44 years	45–64 years	65 years and older
1998					
Quarter 1 .....	5.60	0.25	2.30	2.10	0.89
Quarter 2 .....	6.30	.22	2.20	2.90	1.00
Quarter 3 .....	8.00	.42	3.20	2.80	1.50
Quarter 4 .....	7.70	.16	2.50	3.20	1.80
1999					
Quarter 1 .....	5.90	.19	2.10	2.60	.90
Quarter 2 .....	5.90	.16	2.00	2.20	1.20
Quarter 3 .....	7.00	.26	2.70	2.70	1.20
Quarter 4 .....	5.30	.24	2.00	2.60	1.00
2000					
Quarter 1 .....	6.30	.19	2.60	2.20	1.20
Quarter 2 .....	6.60	.26	2.40	2.80	1.10
Quarter 3 .....	8.20	.26	3.40	3.00	1.40
Quarter 4 .....	7.60	.22	2.80	2.80	1.70
2001					
Quarter 1 .....	6.20	.16	2.40	2.60	0.89
Quarter 2 .....	6.00	.32	2.60	2.00	.97
Quarter 3 .....	8.90	.42	2.80	3.30	2.30
Quarter 4 .....	6.10	.15	2.60	2.50	.78
2002					
Quarter 1 .....	5.00	.16	2.00	2.20	.65
Quarter 2 .....	5.80	.27	2.30	2.50	.69
Quarter 3 .....	7.80	.26	2.90	3.30	1.10
Quarter 4 .....	6.90	.24	2.70	2.90	1.00

Table 2. Quarterly airfare expenditures, in billions of dollars, by region of residence, Consumer Expenditure Interview Survey, 1998–2002

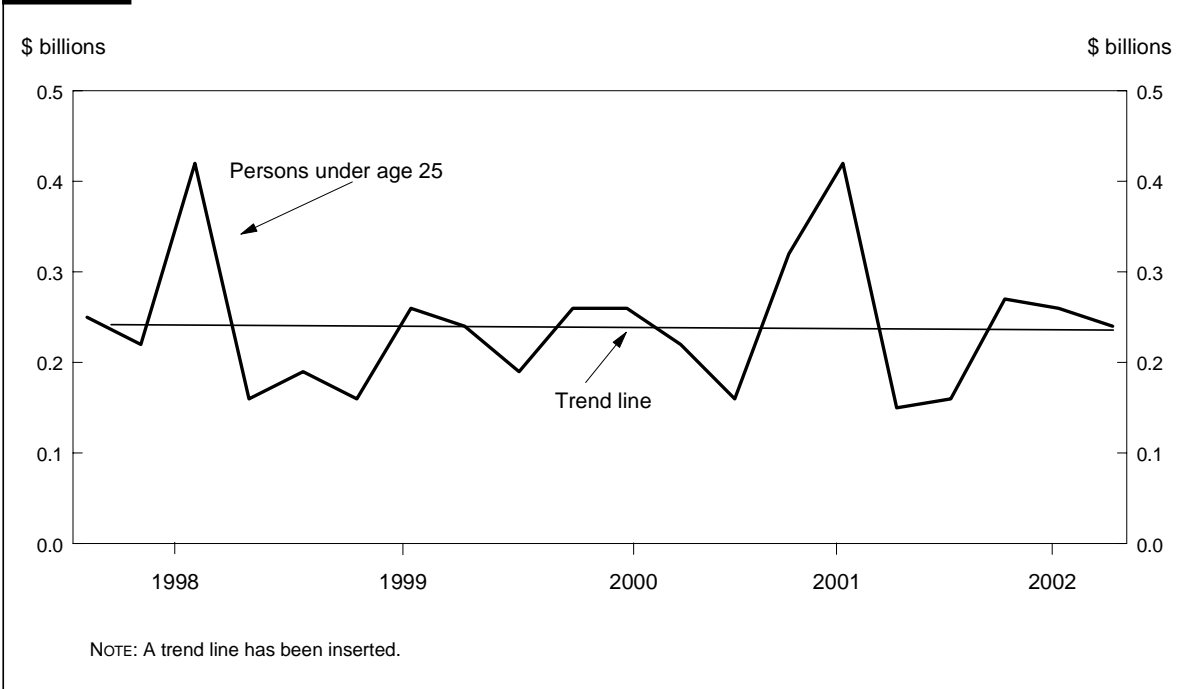
Year and quarter	Northeast	Midwest	South	West
1998				
Quarter 1 .....	1.00	1.10	1.30	2.00
Quarter 2 .....	1.70	1.40	1.30	1.80
Quarter 3 .....	1.60	1.20	2.00	3.10
Quarter 4 .....	1.90	1.30	2.00	2.40
1999				
Quarter 1 .....	1.20	1.40	1.40	1.70
Quarter 2 .....	1.60	1.40	1.30	1.40
Quarter 3 .....	1.40	1.20	2.20	2.00
Quarter 4 .....	1.10	1.00	1.30	1.80
2000				
Quarter 1 .....	1.20	1.80	1.40	1.90
Quarter 2 .....	1.80	1.60	1.50	1.60
Quarter 3 .....	1.60	1.60	2.30	2.60
Quarter 4 .....	1.60	1.90	1.90	2.10
2001				
Quarter 1 .....	1.10	1.10	1.40	2.30
Quarter 2 .....	1.50	1.40	1.40	1.60
Quarter 3 .....	2.10	1.70	2.50	2.50
Quarter 4 .....	1.50	1.20	1.60	1.70
2002				
Quarter 1 .....	.99	1.10	1.40	1.50
Quarter 2 .....	1.40	1.40	1.30	1.40
Quarter 3 .....	1.50	1.50	2.40	2.10
Quarter 4 .....	1.70	1.40	1.70	2.10

Table 3. Average quarterly airfare expenditures per consumer unit, by region of residence, Consumer Expenditure Interview Survey, 1998–2002

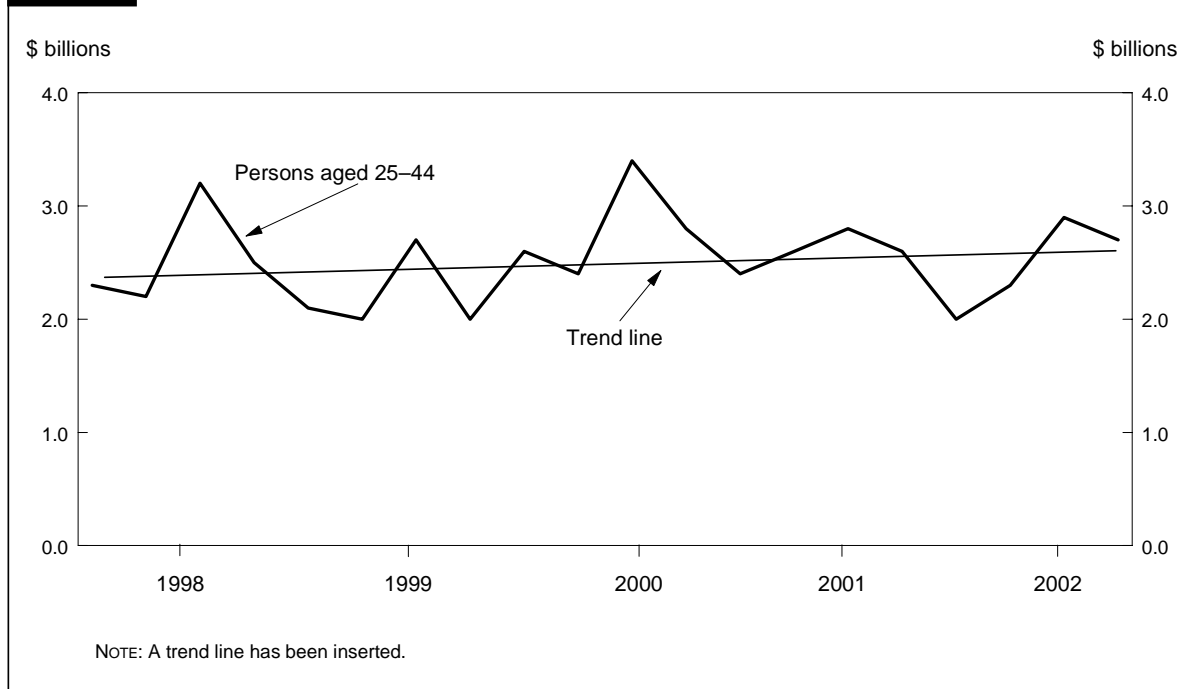
Year and quarter	Northeast	Midwest	South	West
1998				
Quarter 1 .....	\$157	\$139	\$115	\$214
Quarter 2 .....	242	166	121	200
Quarter 3 .....	200	114	146	278
Quarter 4 .....	232	115	158	223
1999				
Quarter 1 .....	218	178	129	180
Quarter 2 .....	268	168	127	150
Quarter 3 .....	186	119	165	192
Quarter 4 .....	200	128	135	227
2000				
Quarter 1 .....	204	221	138	218
Quarter 2 .....	298	181	163	190
Quarter 3 .....	197	157	183	247
Quarter 4 .....	238	188	158	213
2001				
Quarter 1 .....	226	139	144	264
Quarter 2 .....	261	160	152	190
Quarter 3 .....	310	173	214	247
Quarter 4 .....	200	129	148	162
2002				
Quarter 1 .....	174	145	137	167
Quarter 2 .....	249	178	127	169
Quarter 3 .....	206	154	179	202
Quarter 4 .....	247	146	149	207



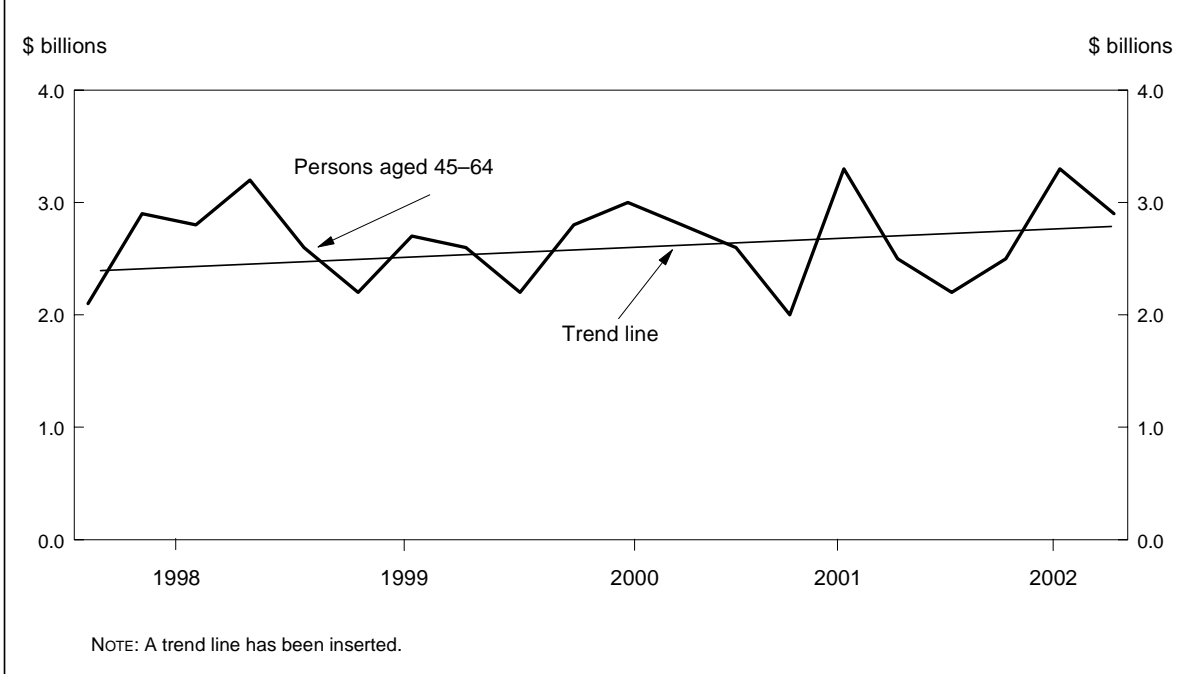
**Chart 2. Quarterly airfare expenditures, persons under age 25, 1998–2002**



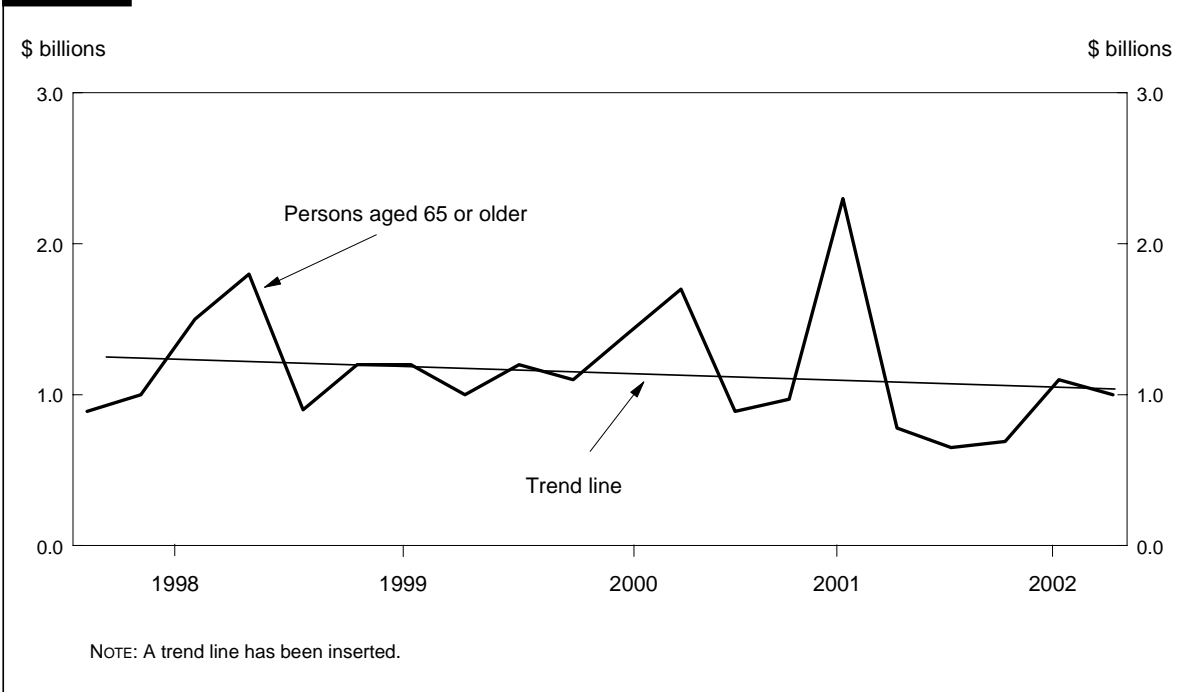
**Chart 3. Quarterly airfare expenditures, persons aged 25–44 years, 1998–2002**



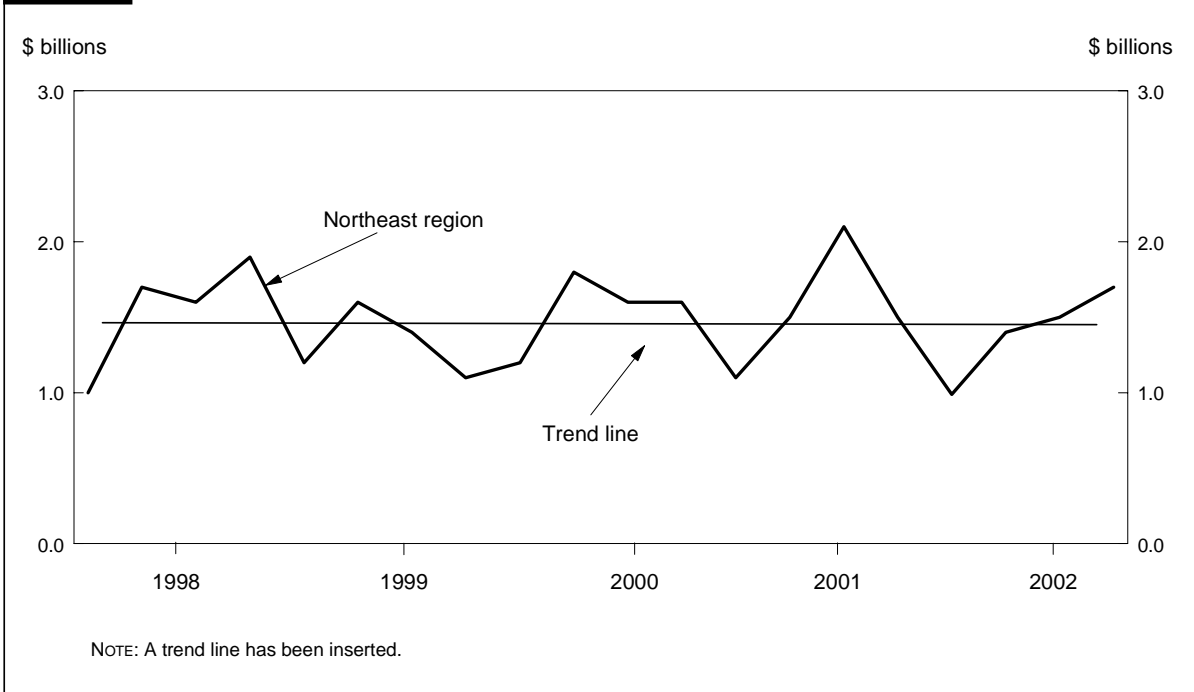
**Chart 4. Quarterly airfare expenditures, persons aged 45–64 years, 1998–2002**



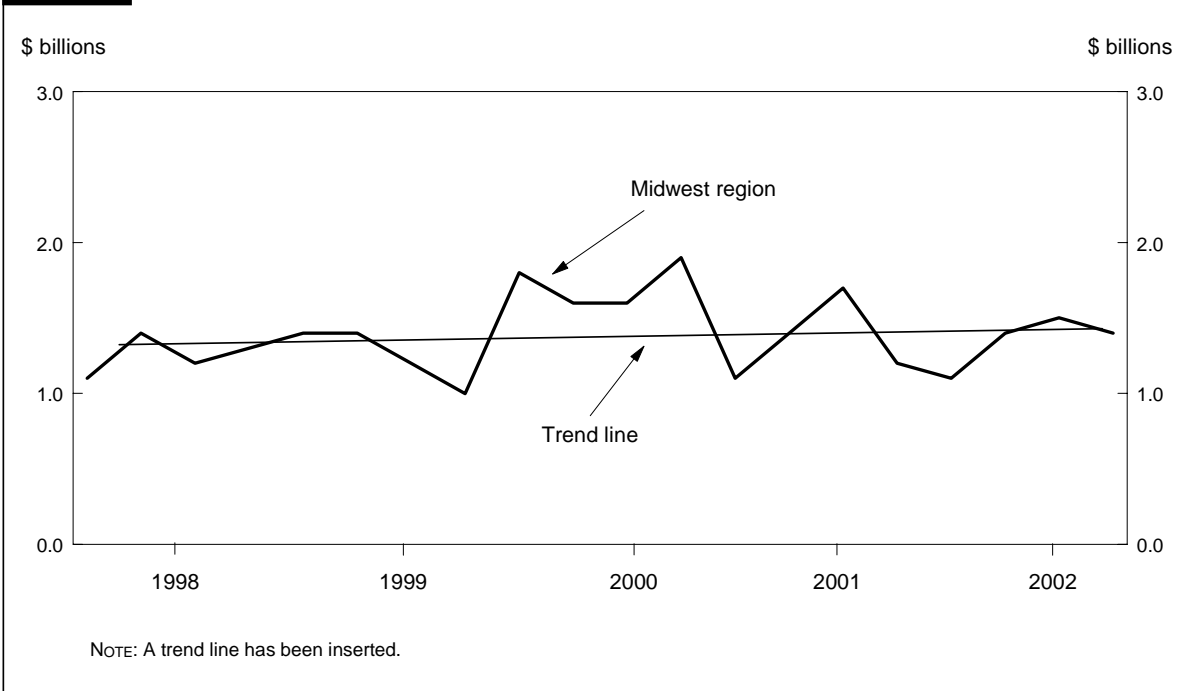
**Chart 5. Quarterly airfare expenditures, persons aged 65 years and older, 1998–2002**



**Chart 6. Quarterly airfare expenditures, Northeast region, 1998–2002**

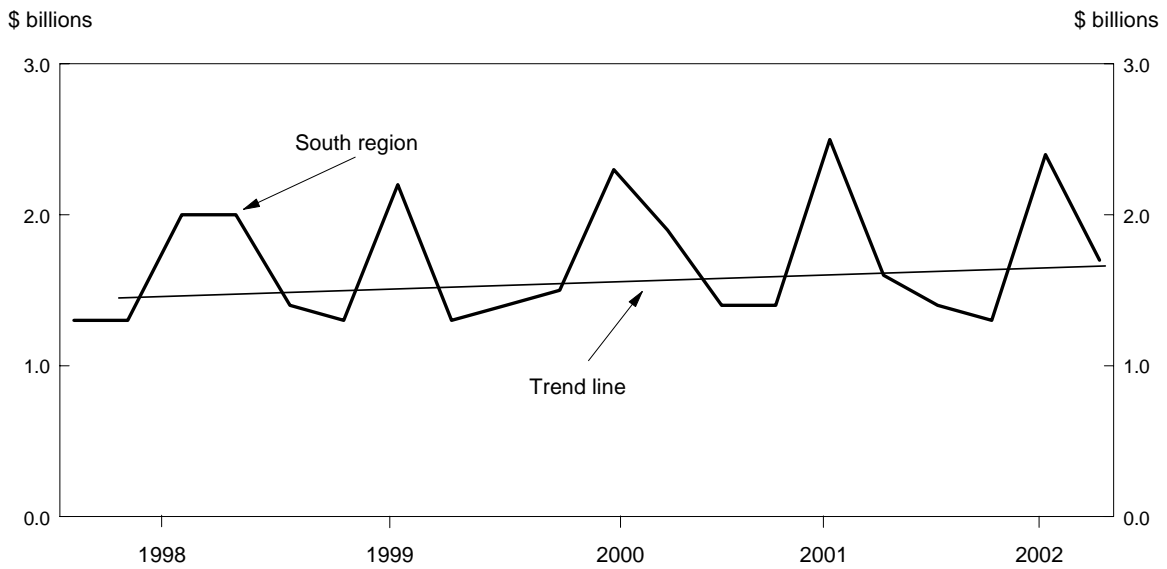


**Chart 7. Quarterly airfare expenditures, Midwest region, 1998–2002**



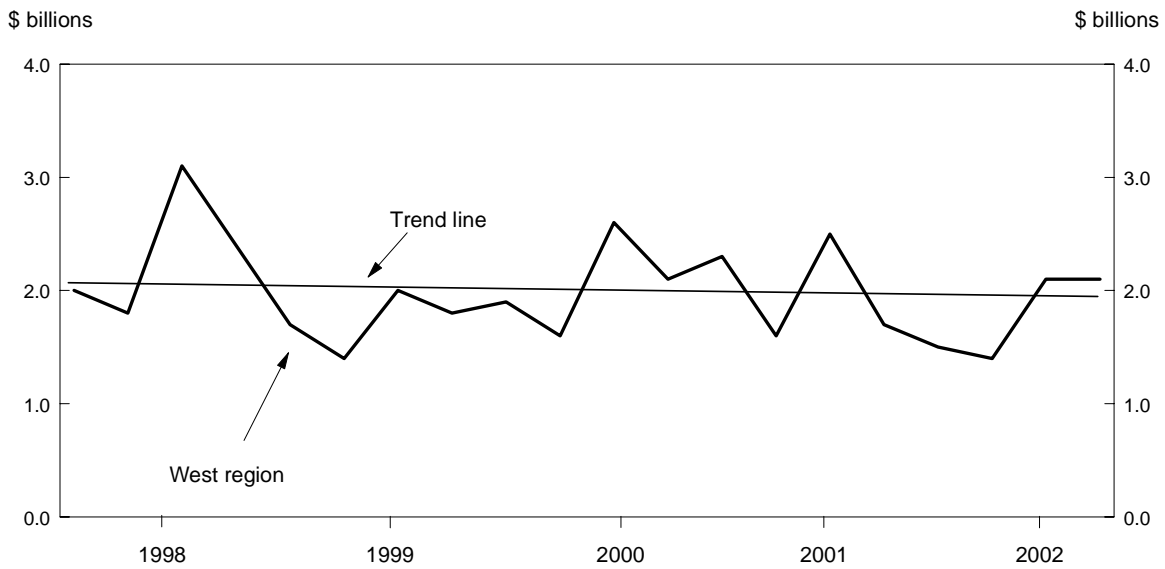


**Chart 8. Quarterly airfare expenditures, South region, 1998–2002**



NOTE: A trend line has been inserted.

**Chart 9. Quarterly airfare expenditures, West region, 1998–2002**



NOTE: A trend line has been inserted.